WHAT IS CLAIMED IS:

1. A communication device, comprising:

a plurality of physical layers;

memory means for storing a communication quality level required by an application; and

physical layer selecting means for selecting among said plurality of physical layers, a physical layer currently capable of providing communications in the communication quality level required by the subject application, as a physical layer for the subject application to use in communicating.

2. The communication device as set forth in claim 1, wherein:

said communication quality level is determined by an effective throughput, a response time, a transmission rate of the physical layer or a receiving radio field intensity.

3. The communication device as set forth in claim 1, wherein:

in the case where none of the physical layers is capable of providing communications in the quality level required by the subject application, said physical layer selecting means informs that to the subject application to

urge it to lower the communication quality level to be required.

4. The communication device as set forth in claim 1, wherein:

said physical layer selecting means determines a current communication state of each of said plurality of physical layers according to a predetermined priority order set beforehand from that of the highest priority if it is capable of providing communications in the communication quality level required by the subject application, and selects the physical layer capable of providing communications in the communication quality level if any.

5. The communication device as set forth in claim 1, wherein:

said plurality of physical layers include a physical layer for use in communicating via the radio communication path.

6. The communication device as set forth in claim 5, wherein:

said plurality of physical layers include a physical layer which communicates via the radio communication

path, using a radio frequency band of either 2.4 [GHz] band or 5 [GHz] band.

7. The communication device as set forth in claim 5, wherein:

at least one of said plurality of physical layers that communicates via the radio communication path is provided with a plurality of antennas, and

when determining a current communication state of each of said plurality of physical layers if it is capable of providing communications in the communication quality level as required by the subject application, said physical layer selecting means switches an antenna among said plurality of antennas in order to obtain respective receiving states, and determines the current communication state of each of said plurality of physical layers based on a receiving state.

8. The communication device as set forth in claim 5, wherein:

the physical layer that communicates via the radio communication path is provided in plural number, and

a physical layer having a highest radio wave frequency of said plurality of physical layers is provided with a mobile antenna that permits its installation

position to be changed.

9. The communication device as set forth in claim 5, wherein:

at least one of said plurality of physical layers that communicates via the radio communication path includes a mobile antenna that permits its installation position to be changed, and

said communication device further comprising:

stoppage instruction means for temporally stopping the operation of selecting the physical layer by said physical layer selecting means while the placement position of the mobile antenna is being adjusted.

10. The communication device as set forth in claim 4, wherein:

said plurality of physical layers include plural physical layers that communicate via the radio communication path, and

the priority order of these physical layers is set such that the higher is the radio field frequency, the higher is the priority order.

11. The communication device as set forth in claim 3, wherein:

said memory means stores the priority order of said plurality of physical layers independently for each application, and

upon selecting a physical layer for the application to use in communicating, said physical layer selecting means reads out the priority order of the application from the memory means and selects the physical layer according to the priority order.

12. The communication device as set forth in claim 1, wherein:

said physical layer selecting means selects a physical layer for the subject application to use in both directions of transmitting and receiving.

13. The communication device as set forth in claim 1, wherein:

said physical layer selects the first physical layer for use in transmitting a signal in a transmitting direction or a receiving direction which is mainly used, at least one of said plurality of physical layers that communicate via the radio communication path are provided with a plurality of antennas, and selects from other physical layers than the second physical layer for use in signal transmission in other direction.

14. The communication device as set forth in claim 1, wherein:

said memory means stores a transmission method of either full-duplex transmission or half-duplex transmission to be adopted for each application; and

in the case where the stored transmission method for the subject application is a half duplex transmission, said physical layer selecting means selects a physical layer for both transmitting and receiving directions to be used for the application; while, in the case where the transmission method stored for the subject application is a half duplex transmission, said physical layer selecting means selects a physical layer for use in transmitting a signal in either a transmitting direction or a receiving direction which is mainly used, and selects from other physical layer than the physical layer for use in transmitting a signal in the mainly used direction, for use in transmitting a signal in the other direction.

15. The communication device as set forth in claim 1, wherein:

said physical layer selecting means is provided with physical layer fixing means which makes said physical layer selecting means select a predetermined physical

layer for the subjection application to use in communicating, irrespectively of a communication state.

16. The communication device as set forth in claim 15, wherein:

said physical layer fixing means makes said physical layer selecting means select the predetermined physical layer only when the subject application does not require the band grantee.

17. The communication device as set forth in claim 1, wherein:

in the case where the subject application starts communicating with a second correspondent different from a first correspondent which is a current correspondent of the subject application, said physical layer selecting means selects from said plurality of physical layers, a physical layer not in use by the subject application, as a physical layer for use in communicating with the second correspondent.

18. The communication device as set forth in claim 17, wherein:

in the case where the physical layer as selected for use in communicating with the second correspondent

cannot be used, said physical layer selecting means selects the physical layer in use for communicating with the first correspondent to be used in common between the first correspondent and the second correspondent.

19. The communication device as set forth in claim 13, wherein:

in the case where the subject application starts communicating with a second correspondent different from a first correspondent to which the subject application is communicating, said physical layer selecting means selects between the first physical layer in use by the subject application and the second physical layer, the second physical layer to be used in common between said first correspondent and said second correspondent.

20. The communication device as set forth in claim 19, wherein:

in the case where the physical layer as selected for use in communicating with the second correspondent cannot be used, said physical layer selecting means selects the first physical layer to be used in common between the first correspondent and the second correspondent.

21. The communication device as set forth in claim 1, further comprising:

communication state presenting means which presents a communication state of each of said plurality of layers.

22. The communication device as set forth in claim 5, further comprising:

communication state presenting means which presents a communication state of each of said plurality of layers.

23. The communication device as set forth in claim 21, wherein:

said application is provided in plural number, and

said communication state presenting means presents if a communication state of each physical layer is capable of providing communications in the communication quality level required by each application.

24. The communication device as set forth in claim 21, wherein:

communication state presenting means presents not only the communication state of each of said plurality of

physical layers but also the physical layer being selected by said physical layer selecting means.

25. The communication device as set forth in claim 21, wherein:

communication state presenting means presents said communication state together with a display by said application.

26. The communication device as set forth in claim 1, wherein:

said communication device is a video receiving device or a video storage device.

27. The communication device as set forth in claim 1, wherein:

said communication device is a video transmitting device.

28. A program which makes a computer operate as:

memory means for storing a communication quality level required by an application; and

physical layer selecting means for selecting among said plurality of physical layers, a physical layer currently capable of providing communications in the

communication quality level required by the subject application, as a physical layer for the subject application to use in communicating.

29. A recording medium storing a program which makes a computer operate as:

memory means for storing a communication quality level required by an application; and

physical layer selecting means for selecting among said plurality of physical layers, a physical layer currently capable of providing communications in the communication quality level required by the subject application, as a physical layer for the subject application to use in communicating.